

**Environmental Impact Assessment
and
Environmental Management Plan**

Date

CEPF Grant 63831

Grantee

Project Title: Integrated Drini River Basin Management(IDBM)

Project Location: Albania (Mediterranean Basin)

Grant Summary

1. Grantee organization. ALBAFOREST
 2. Grant title. *Integrated Drini River Basin Management (IDBM)*
 3. GEM number: 63831.
 4. Grant amount: 116.144.00 US dollars.
 5. Proposed dates of grant. Start date: March, 1st, 2014, end date, February, 28th, 2015
 6. Countries or territories where project will be undertaken. Albania
 7. Summary of the project “Integrated Drini River Basin Management (IDBM)”
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The Drini River Delta (DRD) is 1 of 3 deltas found on the northern Adriatic coast of Albania which harbors significant biodiversity values. Based on assessments of impacts of climate change, the DRD has been identified as a region of critical vulnerability to climate change. The value of DRD area for wildlife conservation has been recognized for many years, particularly in terms of the wide variety of plants and animals associated with them. DRD is continue to be threatened by alteration of their functions which means degradation of their values, despite the fact that certain positive step in the direction of their sustainable management have started.

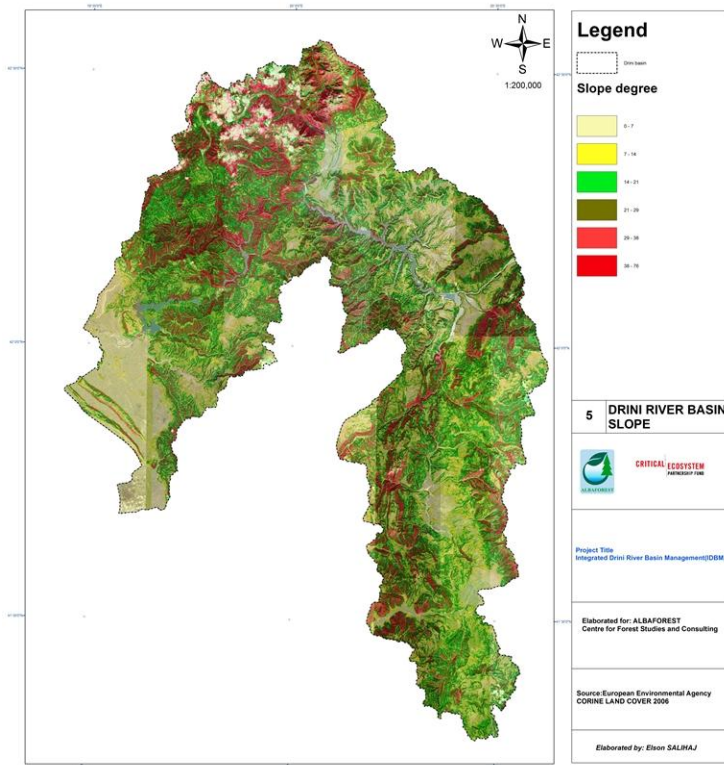
There is already evidence that all habitat types of the DRD have been subject to significant erosion and inundation and inland intrusion of saline water. Rapidly growing erosion and inland intrusion of saline water throughout DRD area is causing numerous and irreversible consequences:

- Degraded natural resources and ecosystems;
- Loss of coastal, marine and estuaries habitats;
- Extensive clearing of coastal vegetation, loss of flora and fauna.

Erosion risk

About 58 % of the Drini River area is covered by forests (41.8 %) and pastures (16.2 %). Around 15.5 % consists of arable land and the rest (26.6 %) of water, stones, etc. The forest area comprises coniferous species or evergreen forests (about 14.5 %), broadleaves species or deciduous species (71.3 %) and shrubs (14.8 %).

To protect the wealthy biodiversity in the study area, about 51,500 ha are included in protection zones, as: Lumi i Gashit (Gashi River)-5900 ha, TejDrinittëBardhë (Over white Drin)-30 ha, Luzni-Bulac-5900 ha, Lugina e Valbonës (Valbona valley)-8000 ha, Thethi-2630 ha, Lura-1280 ha, etc.



Ecosystems

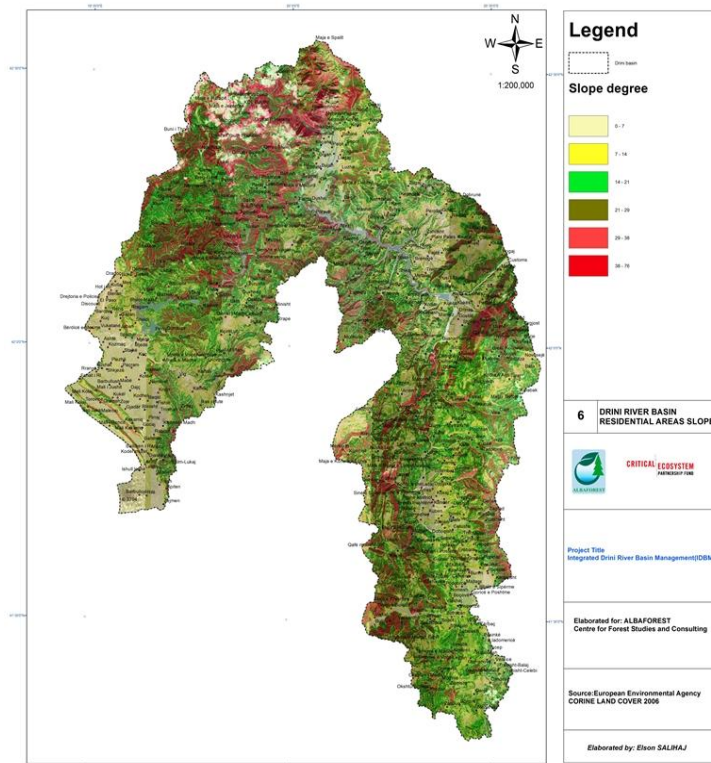
Ecosystems and the plants and animals they contain are sensitive to changes in their environment. Aspects such as temperature, rainfall, flooding and river flows affect the space available for them and the food available to them. The fabric and make-up of ecosystems in turn largely determines the resources and Space that are available for humans to use and exploit.

Therefore, alterations in biodiversity can change the whole ecological dynamics of an area and should be carefully considered. It is important that the eco-systems of the DMRD area are considered as an integrated whole, and not as individual parcels, as they are often intricately linked together whereby changes in one lead to changes in surrounding systems, including human systems.

Socio-economic aspects

The Drini basin regions, its size and population is as following:

- Size: 6.103,94km²
- 4 regions (Dibra, Kukësi, Shkodra and Lezha);
- 12 districts (3 per each regions);
- 101 communes (Dibra: 32, Kukësi: 25, Shkodra: 30, Lezha: 14,)
- Population: 628,703 inhabitants;



The Drin is extremely important for the Albanian economy, especially for its electricity production. Three dams are built over its cascades producing most of Albania's electricity. The artificial Lake Fierza created by the dam at Fierza is the largest artificial lake in Albania with its surface of 73 km². The second largest lake is also built on this river. Lake Vau i Dejës has an area of 25 km².

The Drini River watershed includes four regions: Dibra, Kukësi, Shkodra, Lezha, with 12 districts and a considerable number of communes/municipalities, the demonstration models being established will be in 4–representative selected community's micro-catchments (one in each region).

Pilot Demonstration Sites

The selection criteria of the pilot demonstrations of the 4-regions **have been** as following:

- i. Degradation scale of natural resources
- ii. Topography
- iii. Cases of flooding and landslides
- iv. Sediment loads
- v. The importance of critical ecosystems and biodiversity;

The proposed project aims at identifying the natural environment problems and critical ecosystems status and demonstrate rehabilitation and restore the Drini's basin natural resources, the critical ecosystems of influence for the agriculture land and forest coverage in areas of high erosion of the Drini river watershed and develop actions through demonstration of combined biological models of rehabilitation and communities awareness raising and promotion of a sustainable natural resources, landuse system and holistic territory management. The decision to

implement protective measures and rehabilitation use the results to address the impact in decision-making for afforestation, rehabilitation of the basin's micro-catchments of defensive works and involvement in other investment plans.

Project Approach

The project will build linkages and cooperate with carried out and other ongoing project as:

- (i) The Drini Dialogue of GWP&UNDP,
- (ii) Identification and Implementation of Adaptation Response Measures in the Drini - Mati River's Deltas(UNDP/GEF),
- (iii) Mountain Rural Development (GIZ) etc.
- (iv) GEF Project "Enabling Transboundary Cooperation in the Extended Drin River Basin".
- (v) Natural Resources Development Project (NRDP/WB);

The project will develop and implement mini-projects models due to the sub-sectoral issues evidenced and support community-based capacity building by organizing informative (regional) and training workshops (Shkodra) to present them to the communities representatives and their technical administration and know-how of rehabilitation measures through biological operations to build communities technical capacities to rehabilitate the affected agriculture and forestlands and upgrading communities technical capacities to prevent basin mismanagement and demonstrate its integrated management.

The project will focus on the following crucial issues of the DRD and contribute to:

1. Preservation and enhancing of biodiversity of the mountainous ecosystems by restoring degraded natural resources to preserve important critical ecosystems;
2. Reinstalling of forest and grassland vegetation in the rehabilitated area of the critical ecosystem sites and restoration of the natural spontaneous vegetation of the damaged sites in the rehabilitation pilot-areas; (in 4-selected regional sites within Drini's basin);
3. Re-establish soil and water balance and flooding prevention, increase wood production and soil productivity of the Drini watershed and contributing in carbon sequestration in the selected rehabilitation pilot areas of Drini's basin, by planting of 60,000 forest trees within degraded sites/areas.
4. Promote reactivate the antierosive and protective check-dams against sedimentation by curving of soil loss and curving downstream sedimentation to the Drini basin catchments through demonstrate of mini-projects development applied in the selected most degraded micro-catchments and ecosystems sites due to the sub-sectoral issues evidenced.
5. Reducing the landslide through reduction of the erosion scale in the rehabilitated area and torrents courses and the visible positive impact in minimizing the downstream sedimentation and water turbulences and landslides stabilization;
6. Support strengthening Drini's basin community-based capacity building through know-how provision and organize training workshops to upgrade community capacities for sustainable NRs managements, develop and deliver a local-regional strategic action plan for "Drini" basin's integrated management.

Long-term impacts:

Integrated Drini's river Basin Integrated Management (IDBM) as a process of managing integrated natural resources and human activities on the watershed basis,

The real long-term impact of the project expected is to:

1. Restore degraded natural resources and preserve important critical ecosystems.
2. Preservation and enhancing of biodiversity of the mountainous ecosystems and flooding prevention;
3. Support "Drini" basin communities capacity building and creating decentralized best landuse practices and NR management by the local Government's through training and active participation in creating sustainable NR management models approach.

Short-term impacts:

The project short-term impact is: The project will develop a holistic Drini's basin field survey of environmental and natural ecosystems status and demonstrate combined rehabilitation biological models and support community-based capacity building;

The project will be contributing to:

1.Rehabilitation of bared/eroded land and degraded nature though demonstration combined biological models measures in the selected pilot areas of Drini's basin as: reforestation, check-dams installation and fences erection and herbaceous grasses-seeding.

2.Reducing the landslide through reduction of the erosion scale in the rehabilitated area and torrents courses and the visible positive impact in minimizing the downstream sedimentation and water turbulences and landslides stabilization;

3. Reinstalling of forest and grassland vegetation in the rehabilitated area of the critical ecosystem sites and restoration of the natural spontaneous vegetation of the damaged sites in the rehabilitation pilot-areas; (in 4-selected regional sites within Drini's basin);

4. Re-establish soil and water balance and flooding prevention, increase wood production and soil productivity of the Drini watershed and contributing in carbon sequestration in the selected rehabilitation pilot areas of Drini's basin, by planting of 60,000 forest trees within degraded sites/areas.

5.Promote reactivate the anti-erosive and protective check-dams against sedimentation by curving of soil loss and curving downstream sedimentation to the Drini basin catchments through demonstrate of mini-projects development applied in the selected most degraded micro-catchments and ecosystems sites due to the sub-sectorial issues evidenced.

6. SupportDrini's basin community-based capacity building through know-how provision and organize training workshops to upgrade community capacities for sustainable NRs managements, and develop and deliver a local-regional strategic action plan for "Drini" basin's integrated management.

Project components:

1. DriniBasin survey, mapping and selection of sites for rehabilitation and demonstration.
2. Demonstrate environmental rehabilitation at four pilot sites.
3. Capacity building of Drini Basin's communities and stakeholders.

The project combined biological models to be demonstrating will consist of the following:

- (i) Planting forest saplings and scions*
- (ii) Planting scions*
- (iii) Construction of mountain check-dams*
- (iv) Erecting fences alongwith torrent streams*
- (v) Seeding grasses of cultivated pastures*

The project's focus and its planned activities will be as following:

- (i) Drini's basin-catchments survey & mapping and design of interventions plans & costs, MP. Identification of natural environmental problems, bare lands and forestland situation, demonstrate defensive measures structures and actions in areas of high erosion in the upper and lowland of watershed. (Agriculture land, landslides, forests/grasslands, burned areas, protected areas, green areas etc.);
 - (ii) Demonstration of degraded natural environmental rehabilitation interventions in the selected areas by combined biological measures in the micro-catchments, by planting trees and check-dams installation and fences erection, planting 60.000 trees (12,500 sapling and 47.500 scions).
 - (iii) Support community-based capacity building through regional training workshop (Shkodra) with the relevant institutions and civil society for the presentation of results and outcomes to address decision-making for implementing measures to protect basin's areas, through forest improvements, drainage systems, protection of rivers from erosion, exploitation inappropriate.
 - (iv) Public awareness: information, know-how of stakeholders and the local community, through awareness-raising and training activities, the implementation of protective measures and forestland rehabilitation, erosion control, flood protection, Creating decentralized best land use practices and NR management by the local Government;
 - (v) Develop communities and civil society's capacities and improving/enable their skills in basin to apply the necessary approaches, tools, mechanisms and know-how in integrated basin management.
 - (vi) Develop a local-regional strategic action plan with recommendation measures for the prevention, protection and rehabilitation and integrated management of the Drini's basin.
- In total there are planned to be planting 60,000 trees (of which 12,500 sapling and 47.500 scions), and the planting trees will be native and indigenous species and neither exotic and nor evasive spp.

8. Status of area to be impacted:

Within Drini's basin, with a thorough stretch of about 6.103,94 km² are included 4 regions of Albania (Dibra, Kukësi, Shkodra and Lezha), 12 districts (3 per each regions) and 101 communes and municipalities (Dibra: 32, Kukësi: 25, Shkodra: 30, Lezha: 14,) with a total of population of ca 628,703 inhabitants;

The pre-selected micro-catchments are located in the following communities and regions:

- (i) *“Gjoricë”, in the Dibra region,*
- (ii) *“Tërthore”, in the Kukësi region;*
- (iii) *“Vig-Mnelë”, in the Shkodra region ;*
- (iv) *“Blinisht” in the Lezha region ;*

The project will be in partnership with 4-regions and respectively with their 4-Regional Councils representatives, with selected 12-community-based authorities, with interested stakeholders of watershed management and environmental and land user’s NGOs are as following:

- (i) Dibra Regional Council (representative local communities units and land users NGOs);
- (ii) Kukësi Regional Council (representative local communities units and land users NGOs);
- (iii) Shkodra Regional Council (representative local communities units and land users NGOs);
- (iv) Lezha Regional Council (representative local communities units and land users NGOs);

Consultations and Participation of local communities

The community-based representatives have been consulted in the planning phase and will be involved in the planned project’s implementation activities and especially in its training workshops and integrated model approach demonstrations. There will be involved in project’s information and training activities 3-representative from each Community and one from environmental and each land user’s NGOs with a limited number of totally 40 people. The 3-information workshops to be developing in 3-respective regions (Dibra, Kukësi and Lezha) and 3-training workshops being held in Shkodra region, will provide them with technical information about Drini’s basin environmental and ecosystems state and with required knowledge of Drini’s basin sustainable management. The Community’s representatives will be also involved during and in the local strategic action plan for preparation a sustainable integrated Drini’s basin management approach. The topics to be on: Drini’s watershed status and environmental issues, natural ecosystems status and sustainable management, critical ecosystems and biodiversity issues, soil erosion control and bioengineering models, integrated natural resources management models, etc. The sites selected are communities land owned and they’re preliminarily agreed to develop on their own land the project-proposed activities of IDBM.

Anticipated impact:

Fourths micro-catchment are affected by two types of impact.

- 1-Economic impact
- 2-Environmental impact

The economic impact will positively affect the residents who will work for all project operations.

The environmental impact will have negative impacts especially in fauna, in the early stages of project implementation and particularly in some works operations

- opening holes to plant trees
- noise from cars which will transport materials and workers
- noise from workers

But these negative effects will be short in time, after afforestation and curbing erosion will make possible, that together with the cover plant, to have a new equilibrium between the natural flora and fauna.

The planting species will be selected based on existing micro-catchment management plans and their native species list proposed to be planted in the Drini watershed's micro-catchments (Management Plans are designed from the WB-Natural Resources Development Project, <http://www.nrdp-al.org>). There is no risk of introduction of invasive species through the project.

Mitigation measures:

Although the project interventions will have environmental impacts of digging planting trees holes while there will parallel be taking mitigation measures as are the planned combined biological measures and intervention, installing of check-dams and fences which prevent the erosion and stabilize the soil erosion problems. There will be also in bare lands except planting trees and check-dam installation and fences erection all by natural materials of the selected sites, there will be also seeding of herbaceous grasses in the intervention's sites too.

Actions to ensure health and safety:

The project will preliminarily be ensured to secure workers safety during the project activities implementation. The project planned activities are of not any risk of workers health or safety since they are planting trees and installing check-dams with natural materials in the site/s. Nevertheless the workers will be preliminarily instructed of the planned operations and their precaution during their implementation to avoid any risk of health and ensure safety. The ALBAFOREST will select and hire experienced workers for soil bioengineering works who have worked before in such operations and works. The project activities will not cause wastes since within soil of planting trees there will be parallel installing check-dams and they will use the same soil resulted from them and there will not be any remains of waste in the selected working sites.

Permission of the landowner:

The Project has preliminarily received the land permission from the Ministry of Environment, for the 4-respectiver communities and micro-catchments. In addition the Project has agreed and signed cooperation agreement within 4-selected communities wherein the Project will have to take filed actions through planned biological operations.

The Community's representatives will be also involved during and in the local strategic action plan for preparation a sustainable integrated Drini's basin management approach. The topics to be on: Drini's watershed status and environmental issues, natural ecosystems status and sustainable management, critical ecosystems and biodiversity issues, soil erosion control and bioengineering models, integrated natural resources management models, etc. The sites selected are communities land owned and there're preliminarily agreed to develop on their own land the project-proposed activities of IDBM.

Consultation:

The ALBAFOREST staff and drafters of the project have received prior contacts with local community representatives to areas where the project will intervene. Contacts have been made and agreed to in principle with representatives of four municipalities which will be realized in 4-micro-catchments rehabilitation interventions, in municipalities of Gjorica (Dibër), Tërthore (Kukës) on November, 18, 2013 and Vig-Mnelë (Shkodër), Blinisht (Lezhë) regions. Meetings have been taken respectively on November, 19, 2013.

Also for project design has been created group of specialists and consultants are taken contact with them on November, 14, 2013 and November, 15, 2013 and together is the idea and design project in the second phase of the project complete and integrated DrinBasin Management (IDBM) to submit it to CEPF.

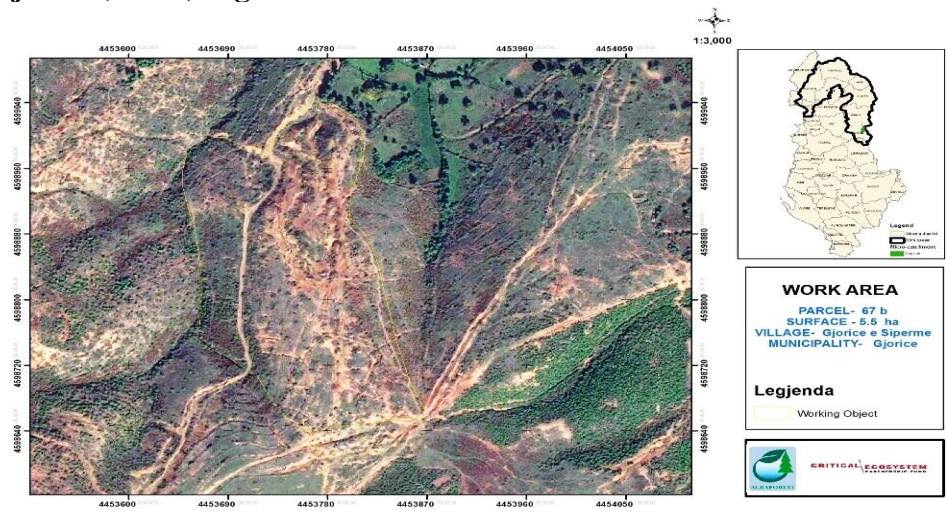
Disclosure:

Upon implementation of the project there will be disclosing from ALBAFOREST Center the original documentation of the entire project in the 4-respective municipalities. There will also be disclosed and Local Strategic Plan for integrated Drin basin management and publications of the project, as well as Environmental Impact Assessment Plan. This aforementioned documentation will be disclosed on March, 5th, 2015.

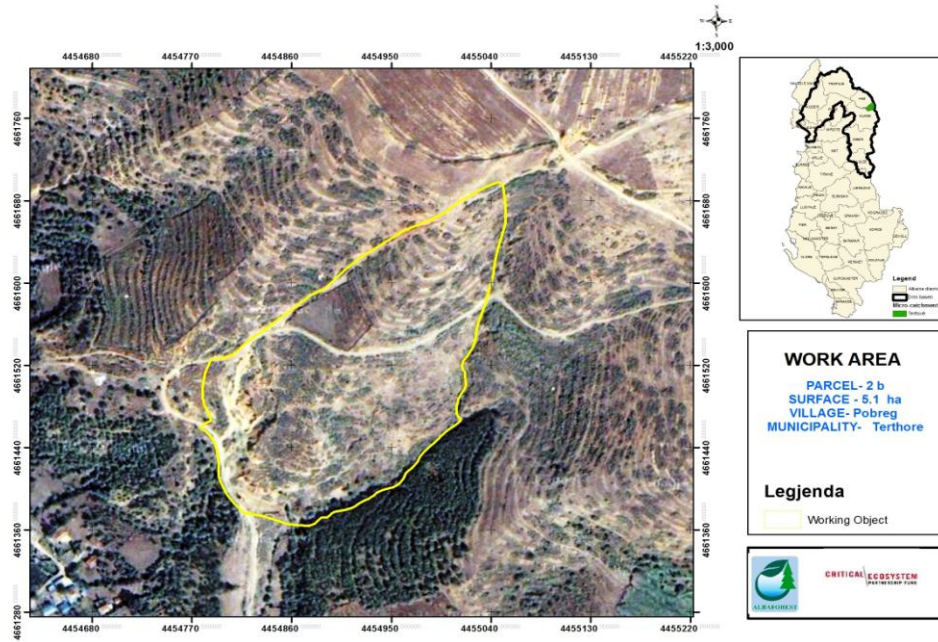
Monitoring and Evaluation:

For monitoring the project and its impact and all activities planned by the management team to implement the project will be reported to the Board of the Centre ALBAFOREST once in every month for its environmental impact and to respect all the criteria and standards technical works and planned interventions that negative impact of interventions with biological works to be as minimal and those mitigation measures associated with negative environmental and injuring effects be eliminated entirely. This will be done throughout the project implementation period and will be reported by the project staff in the ALBAFOREST Board.

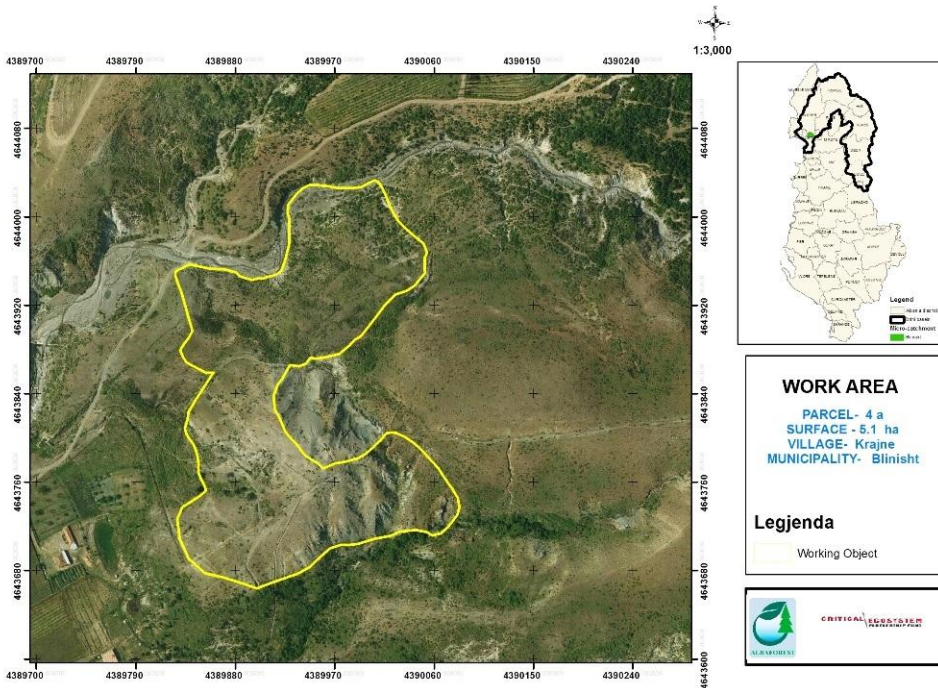
Gjoricë (Dibër) region



Tërthore (Kukës) region



Blinisht (Lezhë) region



Vig-Mnelë (Shkodër) region

